

# 2007 COMPETITION ACADEMIC RULES

## NATIONAL SCIENCE BOWL® & MIDDLE SCHOOL SCIENCE BOWL

*Changes in bold/italic*

### Eligibility Requirements

1. Each competing team consists of four student members and a coach, and may also include one student alternate. A coach can be a teacher, parent or other adult advisor.

**High School:** To be eligible to compete for the National Science Bowl, a student must be enrolled for the current school year in grades nine, ten, eleven or twelve at the team's school, and be less than 20 years of age or receive a special waiver from the Department of Energy. Teams of home school students, girl scouts, boy scouts and science clubs are welcome to participate; *however, if the school a student attends is competing in a Regional Science Bowl, then that student may compete only on a team from that school.*

**Middle School:** To be eligible to compete for the National Middle School Science Bowl a student must be enrolled for the current school year in grades six, seven or eight. Teams may be from a public, private or home-school, but all of the students on the team must attend the same school.

2. No school or student group may compete in more than one regional competition. *No student may compete on more than one team.* Each regional coordinator will determine if more than one team from a high school will be allowed to participate in that regional as well as the geographic area their regional will encompass. No more than 3 teams from one high school or student group may compete in a regional event.
3. To be eligible for the National Science Bowl® or the National Middle School Science Bowl National event, a student must have competed on the team that won the Regional Science Bowl or on the second place team if the first place team declines to attend.
4. The winning team from each regional tournament is **invited** to participate at the National event.

**High School:** The National event will be held April 26 – 30, 2007. By **March 9, 2007**, the winning team's coach is required to inform the National event coordinator of its availability to participate at the Nationals. During this time of the school year, students are participating in a variety of activities and academic events that may conflict with their participation in the National Science Bowl® (including, but not limited to, state athletic tournaments, proms, International Baccalaureate, Advanced Placement and SAT exams). In the interest of safety, continuity, and educational value, the National Science Bowl® requires students to take part in ALL of its events and activities. Therefore, no waivers will be granted or special arrangements made for students to participate in any conflicting activities or exams. If team members are involved in these pursuits, the students will need to determine which activity or event is in their best interest and make their selection by March 9, 2007.

All teams must arrive and depart on the designated dates and be in attendance throughout the duration of the National Science Bowl<sup>®</sup> weekend. If the entire winning regional team (***at least 4 students***) is unable to participate at all activities, the second place team will be invited to replace them.

**Middle School:** The National event will be held June 21 – 24, 2007. The winning team's coach is required to inform the National event coordinator of its availability to participate at the Nationals within two weeks of the regional event date or by **May 13, 2007**, whichever is first. All teams must arrive and depart on the designated dates and be in attendance throughout the duration of the National Middle School Science Bowl weekend. If the entire winning regional team (***at least 4 students***) is unable to participate at all activities, the second place team will be invited to replace them.

## Competition Structure

5. The National event will use a round robin format with several divisions for the preliminary rounds. For the preliminary rounds at the Nationals, teams will be placed in divisions by drawing lots with the number of teams per division as equal as possible. The number of teams in each division will depend on the number of teams participating in the competition. Each team will play every team in its division. At the end of each game, regardless of the overall score, two points are awarded for a win, one point for a tie, and zero points for a loss. There will be no tiebreak questions during the round robin matches. ***The top X teams from each round robin division will move on to the elimination tournament.***
6. Regional competitions have the option of choosing their tournament style, e.g. only double elimination, only round robin, or a combination of both.

## Rules of the Game

7. Two types of questions will be used: toss-up and bonus questions. A toss-up question may be answered by any member of either team that is playing. ***A team answering a toss-up question correctly will always get a chance to answer a bonus question; the other team is ineligible.***
8. On toss-up questions, no consultation among team members may occur. Should consultation among any of the team members occur, any answer given does not count (the moderator does not say whether the answer given was correct or incorrect) and the team loses the right to answer the toss-up question. The question is then offered to the opposing team, ***if eligible.***
9. No team will have more than one opportunity to answer a toss-up question.
10. Questions are either multiple-choice or short answer. The only acceptable answer to a multiple-choice question will be one of those read by the moderator.
11. Once read in its entirety, a question will not be re-read.

12. For toss-up questions, the first player on either team to activate the lock-out buzzer system wins the right to answer the question except that no player may buzz in until AFTER the moderator has identified the subject area of the question. If a player buzzes in prior to the reading of the subject area, the moderator will inform the player that he/she has buzzed in too soon. The moderator may add time back to the clock, if necessary.
13. Before answering a toss-up question, the team member who has buzzed in must be verbally recognized by the moderator *or scientific judge*. (*Before the match, this person will be identified.*) If a student was not recognized, it is treated as a non-answer (Blurt) and the moderator **will award 4 points to the opposing team** but will not indicate whether the answer was right or wrong. ***The toss-up question is then offered to the opposing team, if eligible. If the question has not been completely read, the question is reread in its entirety, and the opposing team has an opportunity to answer the toss-up question with the chance to answer the bonus question if correct.***
14. On any question, the first answer given is the only one that counts. However, if a participant gives both a letter answer and a scientific answer to a multiple choice question, both parts must be correct.
15. If the answer to a toss-up question is wrong and the question was completely read, the other team is given the opportunity to answer it. The second team is allowed a full 5 seconds to buzz in after the first team has answered incorrectly or has answered without being recognized.
16. The answer to a bonus question must come from the team's captain, including when the question has been interrupted. Moderators should ignore an answer from anyone but the captain on the bonus question.

## Timing Rules

17. The match is played until either the time expires or all the toss-up questions have been read. Regional competitions will have two 8-minute halves with a 2-minute break (halves at the Nationals are 10 minutes). Each half begins with a toss-up question.
18. After reading a toss-up question, the moderator will allow 5 seconds for the two teams to respond before proceeding to the next toss-up question. Timing begins after the moderator has completed reading the toss-up question. (***For both High School and Middle School*** )
19. A participant who has buzzed in on a toss-up question must answer the question promptly after being verbally recognized by the moderator *or scientific judge*. After recognizing a participant, the moderator will allow for a natural pause (up to 3 seconds), but if the moderator determines that stalling occurred, ***it will be treated as a wrong answer***. The team loses its opportunity to answer the question and it is offered to the opposing team, if eligible.

20. After a team member has answered a toss-up question correctly, the team is given the opportunity to answer a bonus question. The team will have 20 seconds for *its captain* to begin to give its answer to the bonus question. Consultation among team members is allowed on bonus questions. (*For both High School and Middle School* )
21. On a bonus question, the signal “5 SECONDS” will be given by the timekeeper after 15 seconds of the allowed 20 seconds have expired. Additionally, the timekeeper will indicate the end of the 20-second bonus period by saying “TIME.” If the team captain has not begun the response before the timekeeper calls “TIME”, the answer does not count. If the team captain has begun the response, he/she may complete the answer.

## Scoring

22. Toss-up questions are worth 4 points, and bonus questions are worth 10 points.
23. If a toss-up question is interrupted, the player recognized, and the answer correct, the team will receive 4 points. If the answer is incorrect *or the player buzzing in answers without being verbally recognized*, 4 points are added to the opposing team’s score, the question is reread in its entirety, and the opposing team has an opportunity to answer the toss-up question with the chance to answer the bonus question if correct.
24. The double interrupt. If a toss-up question is interrupted and the answer is incorrect *or the player buzzing in blurts out an answer* before being verbally recognized, 4 points are added to the opposing team’s score. The question is then reread in its entirety. However, if a student on the opposing team interrupts the re-reading of the question *and gives an incorrect answer or blurts before being verbally recognized*, 4 points are added to the *first* team’s score. The moderator will give the correct answer and move on to the next toss-up question.
25. If the moderator inadvertently gives the answer to a toss-up question without giving either team a chance to respond, no points are awarded and the moderator goes on to the next toss-up question.
26. If the moderator inadvertently gives the answer to a toss-up question before allowing the second team to respond (after an incorrect answer, or an answer given without the team member having been recognized) the next toss-up question will be read to the second team in place of the inadvertently answered question.

### Summary of Scoring:

Type of Question	Points Awarded
Correct Toss-up Incorrect Toss-up	+4 points, & eligible for bonus +0 points
Bonus	+10 points
Incorrectly Answered Interrupted Toss-up	+4 points to opposing team
<b><i>Unrecognized Toss-up (Blurt)</i></b> <b><i>Unrecognized Interrupted Toss-up (also a Blurt)</i></b>	<b><i>+4 points to opposing team</i></b>
Consultation or answering without buzzing in on a Toss-up	+0 points

### Challenges

27. Challenges must be made before the moderator begins the next question. All challenges must come from the team members who are actively competing. The alternate and/or the coach may not object verbally or by signal. If either the alternate or the coach objects verbally or by signal to the active team members, the challenge will not be allowed. All decisions of the judges are final.
28. ***Challenges may be made either to scientific content or to the application of the rules. Challenges may NOT be made to judgment calls by the officials, including but not limited to whether a question has been interrupted, whether 5 seconds have elapsed before a student buzzes in on a toss-up, whether 20 seconds have elapsed before a captain begins answering a toss-up, whether a half has expired before a new toss-up question begins, whether a stall or consultation has occurred, or whether time should be added back to the clock.***
29. Should a question or challenge arise during a competition, the competition and the clock will be stopped until the question is resolved. Once the question has been resolved, the match will continue from that point. Should the moderator decide that some time was lost due to the interruption; the moderator has the right to put the appropriate amount of time back on the clock.

## **When Time Runs Out**

30. *If a toss-up question is begun before time expires in a half, that question will be finished under the usual rules of play, including the bonus, if the toss-up is answered correctly. The half is then over. A question will be considered to have been begun if the subject area has been completely read. The second half will begin with the first toss-up question not read in the first half.*

## **Rules for the End of Round Robin or Single Elimination**

31. In the event that the required number of teams from each division are not clearly identifiable [resolution is necessary only between teams tied for last position(s)], a tie-break procedure in the following order will be used:
- (I) Head to head won/loss record
  - (ii) Fewest losses
  - (iii) If two (2) teams are still tied, there will be a five toss-up question run-off (interrupt penalty in effect). No bonus questions will be used during this segment of the competition. If still tied, another five toss-up question run-off will be used, etc. until the advancing team is determined.
  - (iv) If more than two teams are tied, each team, in separate rooms, will be given a series of ten toss-up questions (no bonus questions will be used during this segment of the competition). The usual five (5) seconds will be allowed for a competitor to buzz in after the question is completely read. There are no interrupt penalties but also no reason to interrupt since all ten questions will be read. Scoring will be based on the number of questions right minus the number wrong. If two or more teams are still tied, procedure (iii) or (iv), as appropriate, will be used until the advancing teams are determined.
32. If the score is tied (in the double/single elimination phase only) at the end of the regulation time period, a series of five toss-up questions will be used to break the tie. Interrupt penalties are in effect. Round robin matches may end in a tie as explained in rule 5 above.

## **Miscellaneous Rules**

33. Substitutions may be made only at the half.
34. No one in the audience may communicate with participants during the match; communication will result in ejection from the competition room.
35. If someone in the audience shouts out an answer, the question will be thrown out (as will the person) and the moderator will proceed to the next question.

36. Prior to each match, the two team coaches will introduce themselves to each other and will sit together in the back row of the competition room.
37. No notes may be brought to the competition table. Nothing may be written before the clock starts. Scratch paper will be provided at the beginning of each match and collected at half-time and at the conclusion of the match.
38. Calculators are not permitted.
39. Members of the audience, including the coaches, will not write down the questions/answers the moderator reads or use any electronic recording or transmitting device, including digital cameras during the match. At the Nationals, coaches will be provided with a team score sheet to track the number of questions answered by each individual student on their team. No one else in the competition room is permitted to write or make notes of any kind during the active competition. If this occurs, the individual(s) will be asked to leave the competition room.

### **Model Hydrogen Fuel Cell Car Competition at the Nationals**

**High School:** There will be a model Hydrogen Fuel Cell Car competition at the Nationals this year. General Motors is sponsoring this activity. It is open to all teams, who will be mailed the materials to *build their cars prior to the NSB. Teams must announce their interest and must bring a completed car to the NSB.* Prizes will be awarded.

**Middle School:** See Hydrogen Fuel Cell Car Competition (*MSSB ONLY*) Tab